AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4. (Cancelled).

Claim 5. (Currently Amended) A transmission apparatus comprising:

spreading means for spreading each of an inphase component and a quadrature component of a signal to be transmitted by using a short code and a long code, the inphase component and the quadrature component having been separated from each other before the spreading; and

transmission means for transmitting the signal whose inphase component and quadrature component have been spread,

wherein the ~~spreading means spreads the inphase component and the quadrature component of the signal to be transmitted by using a~~ long code for spreading the [[whose]] inphase component and the long code for spreading the quadrature component are different from each other.

Claim 6. (Currently Amended) The transmission apparatus as claimed in claim 5 [[1]], wherein the ~~quadrature component of~~ the long code for the quadrature component is one obtained by shifting a phase of the ~~inphase component of the~~ long code for the inphase component.

Claim 7. (Currently Amended) The transmission apparatus as claimed in claim 5 [[1]], wherein the spreading means carries out a complex operation between the inphase component and the quadrature component of the signal, and the long code for the inphase component and the long code for the quadrature component ~~of the long code~~.

Claim 8. (Currently Amended) The transmission apparatus as claimed in claim 5 [[1]], wherein the spreading means spreads the inphase component and the quadrature component of the signal by using a same short code for the inphase component and the quadrature component of the signal.

Claim 9. (Currently Amended) A reception apparatus comprising:

reception means for receiving a spread signal; and

despreading means for despreading each of an inphase component and a quadrature component of the received signal by using a short code and a long code, the inphase component and the quadrature component having been separated from each other after the despreading,

wherein the ~~despreading means despreads the inphase component and the quadrature component of the received signal by using a~~ long code for despreading the [[whose]] inphase component and the long code for despreading the quadrature component are different from each other.

Claim 10. (Currently Amended) The reception apparatus as claimed in claim 9 [[5]], wherein the ~~quadrature component of~~ the long code for the quadrature component is one

obtained by shifting a phase of the ~~inphase component of the~~ long code for the inphase component.

Claim 11. (Currently Amended) The reception apparatus as claimed in claim 9 [[5]], wherein the despreading means carries out a complex operation between the inphase component and the quadrature component of the received signal, and the long code for the inphase component and the long code for the quadrature component ~~of the long code~~.

Claim 12. (Currently Amended) The reception apparatus as claimed in claim 9 [[5]], wherein the despreading means despreads the inphase component and the quadrature component of the received signal by using a same short code for the inphase component and the quadrature component of the received signal.

Claim 13. (Currently Amended) A transmission method comprising:

a spreading step of spreading each of an inphase component and a quadrature component of a signal to be transmitted by using a short code and a long code, the inphase component and the quadrature component having been separated from each other before the spreading; and

a transmission step of transmitting the signal whose inphase component and quadrature component have been spread,

wherein the ~~spreading step spreads the inphase component and the quadrature component of the signal to be transmitted by using a~~ long code for spreading the [[whose]] inphase component and the long code for spreading the quadrature component are different from each other.

Claim 14. (Currently Amended) A reception method comprising:

a reception step of receiving a spread signal; and

a despreading step of despreading each of an inphase component and a quadrature component of the received signal by using a short code and a long code, the inphase component and the quadrature component having been separated from each other after the despreading,

wherein the ~~despreading step despreads the inphase component and the quadrature component of the received signal by using a~~ long code for despreading the [[whose]] inphase component and the long code for despreading the quadrature component are different from each other.

Claim 15. (Currently Amended) A communication system comprising a transmission apparatus and a reception apparatus, wherein

the transmission apparatus comprises:

spreading means for spreading each of an inphase component and a quadrature component of a signal to be transmitted by using a short code and a long code, the inphase component and the quadrature component having been separated from each other before the spreading; and

transmission means for transmitting the signal whose inphase component and quadrature component have been spread, and

the ~~spreading means spreads the inphase component and the quadrature component of the signal to be transmitted by using a~~ long code for spreading the

[[whose]] inphase component and the long code for spreading the quadrature component are different from each other, and

the reception apparatus comprises:

reception means for receiving the spread signal; and

despreading means for despreading each of an inphase component and a quadrature component of the received signal by using a short code and a long code, the inphase component and the quadrature component having been separated from each other after the despreading, and

the ~~despreading means despreads the inphase component and the quadrature component of the received signal by using a~~ long code for despreading the [[whose]] inphase component and the long code for despreading the quadrature component are different from each other.